CARDD

MEPA ROUTING MEMO

To:	Mark Bostrom
Through:	Autumn Coleman
From:	Demi Blythe
Re:	Town of Wibaux Wastewater Treatment System Upgrade Adoption Notice
Project Sponsor:	Town of Wibaux
Name of Project:	Town of Wibaux Wastewater Treatment System Upgrade
Agreement No:	RRG-20-1733

Memo:

DNRC can issue an Adoption Notice for the Montana DEQ EA and FONSI and TCEP FONSI for the Town of Wibaux Wastewater Treatment System Upgrade (attached).
SIGNATURE REQUIRED

___/s/DEB___ MEPA/NEPA Coordinator Review

DS MLWB Bureau Chief Review

_____ Division Administrator Signature

_____ Post for _30_ Days on DNRC's Environmental Docs page.

_____ File

NATURAL RESOURCES
AND CONSERVATION

GREG GIANFORTE, GOVERNOR
1539 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE: (406) 444-2074
FAX: (406) 444-2684
PO BOX 201601
HELENA, MONTANA 59620-1601

DECISION NOTICE
ADOPTION OF EXISTING ENVIRONMENTAL REVIEW

Town of Wibaux Wastewater Treatment System Upgrade
September 2021
Town of Wibaux
46.594065, -104.110731
Wibaux County

Existing Environmental Review Document: Montana DEQ FONSI EA and TCEP FONSI Attached Below

Type and Purpose of Action

The Town of Wibaux, through a preliminary engineering report (PER) prepared by Stahly Engineering, identified the need to upgrade its wastewater treatment facility. A new total retention lagoon system was constructed in 2011 to serve the town. However, the lagoon system was physically undersized for current flows and reached its hydraulic capacity in 2015 requiring it to discharge to an adjacent field under discharge permit MT0020516. Town personnel later improvised a piping system to intermittently discharge effluent at the original Beaver Creek outfall adjacent to the aerated lagoon. Since the system was not designed to be a discharging facility it does not meet several Montana Department of Environmental Quality (MDEQ) design standards, nor is it capable of meeting the required discharge limits. The Town has received 14 violation notices from the MDEQ since the current batch discharge system was improvised. In addition, the evaporative lagoons have areas with floating liners, which both reduces the storage capacity of the cells and can lead to liner failure. The evaporative lagoons were designed in a stepped configuration and flow between cells is through sloped piping with fixed inverts. This interconnecting piping design does not allow any cell to be bypassed for repair or sludge removal and the exposed piping becomes clogged with ice during cold months. Lastly, the existing facility lacks a disinfection system and an effluent flow measuring structure which are necessary for discharging facilities.

The proposed project consists of re-purposing the existing evaporation lagoons into storage lagoons; constructing a center pivot system for the land application of treated effluent; and adding disinfection, flow monitoring and effluent sampling systems.

Federal and State grant/loan programs will fund the project. Environmentally sensitive characteristics such as threatened/endangered species, floodplains, wetlands, and historical sites are not expected to be adversely impacted because of the proposed project. No significant long-term environmental impacts were identified.

Construction is expected to begin September 2021.

Explanation of the decision(s) that must be made regarding the proposed action (i.e. approve grant or loan and provide funding):
DNRC approved the loan to provide funding for the Town of Wibaux Wastewater Treatment System Upgrade.

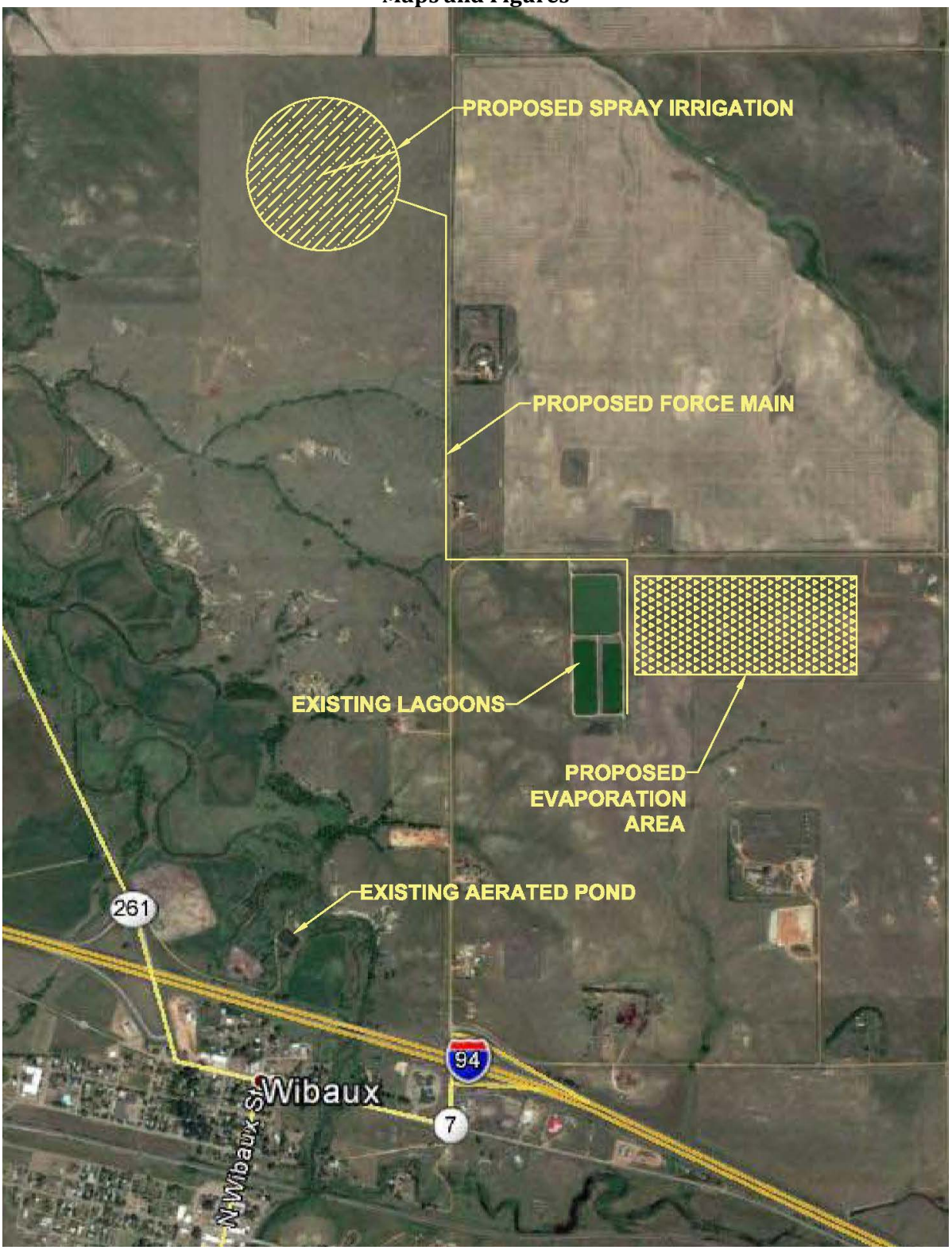
Criteria for Adopting Existing Environmental Review
☒The existing environmental review covers an action paralleling or closely related to the proposed action.
☒The information in the existing environmental review is accurate and clearly presented.
☒The information in the existing environmental review is applicable to the action being considered.
☒All appropriate Agencies were consulted during preparation of the existing environmental review.
☒Alternatives to the proposed action evaluated as part of the existing environmental review effort.
☒The impacts of the proposed action been accurately identified as part of the existing environmental review.
☒The existing environmental review identifies any significant impacts as a result of the proposed action and those identified will they be mitigated below the level of significance.

Adopt
The existing environmental review can be considered sufficient to satisfy DNRC's MEPA review responsibilities. No further analysis needed.

Existing Analysis Prepared By:	**Name:** Demitra Blythe	**Date:** 8/9/2021
	Title: CARD Division MEPA/NEPA Coordinator	
	Email: Demitra.Blythe@mt.gov	

Approved By:	Name: Mark Bostrom	
	Title: CARD Division Administrator	
Signature:	DocuSigned by: Mark W Bostrom BF7A1C50B2AF4DE...	**Date**: 8/31/2021

Maps and Figures



DEQ
Montana Department of Environmental Quality

January 8, 2020

David Bertelsen, Mayor
Town of Wibaux
P.O. Box 219
Wibaux, MT 59353

RE: Wastewater System Improvements Project
Environmental Assessment
C301257

Dear Mayor Bertelsen:

Enclosed is a copy of the Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) for the Wibaux Wastewater Improvements Project. **Please print the FONSI letter in one publication of your local paper under legal advertising and return the Proof of Advertising.** You do not have to print the EA, just have it available for public review should there be interest. We recommend you advertise this as soon as possible to allow for a 30-day comment period. **The FONSI and EA will be placed on our website for public review at http://deq.mt.gov/Public/ea.**

If you have any questions, please do not hesitate to contact me at (406) 444-6776.

Sincerely,

Mike Abrahamson, P.E.
Environmental Engineer
Engineering Bureau

Enclosures

cc (via e-mail): Ryan Rittal, P.E., Stahly Engineering
Robie Culver, Stahly Engineering

DEQ
Montana Department of Environmental Quality

January 8, 2020

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the proposed action below:

Project	Wibaux Wastewater Treatment Improvements Project
Location	Wibaux, Montana
Project Number	C301302
Total Cost	$2,196,000

The Town of Wibaux, through a preliminary engineering report (PER) prepared by Stahly Engineering, identified the need to upgrade its wastewater treatment facility. A new total retention lagoon system was constructed in 2011 to serve the town. However, the lagoon system was physically undersized for current flows and reached its hydraulic capacity in 2015 requiring it to discharge to an adjacent field under discharge permit MT0020516. Town personnel later improvised a piping system in order to intermittently discharge effluent at the original Beaver Creek outfall adjacent to the aerated lagoon. Since the system was not designed to be a discharging facility it does not meet several Montana Department of Environmental Quality (MDEQ) design standards, nor is it capable of meeting the required discharge limits. The Town has received 14 violation notices from the MDEQ since the current batch discharge system was improvised. In addition, the evaporative lagoons have areas with floating liners, which both reduces the storage capacity of the cells and can lead to liner failure. The evaporative lagoons were designed in a stepped configuration and flow between cells is through sloped piping with fixed inverts. This interconnecting piping design does not allow any cell to be bypassed for repair or sludge removal and the exposed piping becomes clogged with ice during cold months. Lastly, the existing facility lacks a disinfection system and an effluent flow measuring structure which are necessary for discharging facilities.

The proposed project consists of re-purposing the existing evaporation lagoons into storage lagoons; constructing a center pivot system for the land application of treated effluent; and adding disinfection, flow monitoring and effluent sampling systems.

Federal and State grant/loan programs will fund the project. Environmentally sensitive characteristics such as threatened/endangered species, floodplains, wetlands, and historical sites are not expected to be adversely impacted because of the proposed project. No significant long-term environmental impacts were identified.

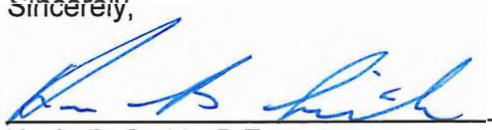
An environmental assessment (EA), which describes the project and analyzes the impacts in more detail, is available for public scrutiny on the DEQ web site (http://deq.mt.gov/Public/ea) and at the following locations:

Mike Abrahamson, P.E.
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-09011
mabrahamson@mt.gov

David Bertelsen, Mayor
Town of Wibaux
109 1st Ave SE
Wibaux, MT 59353

Comments on the EA may be submitted to the Department of Environmental Quality at the above address. After evaluating substantive comments received, the Department will revise the environmental assessment or determine if an environmental impact statement is necessary. If no substantive comments are received during the comment period, or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant, the agency will make a final decision. No administrative action will be taken on the project for at least 30 calendar days after release of the Finding of No Significant Impact.

Sincerely,



Kevin B. Smith, P.E.
Engineering Bureau
Water Quality Division
Montana Department of Environmental Quality

TOWN OF WIBAUX

WASTEWATER IMPROVEMENTS PROJECT

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant:	Town of Wibaux
Address:	109 1st Ave SE Wibaux, MT 59353
Project Number:	SRF Project # C301257

B. CONTACT PERSON

Name:	Mayor David Bertelsen
Address:	PO Box 219 Wibaux, MT 59353
Telephone:	(406) 796-2412

C. ABSTRACT

The Town of Wibaux, through a preliminary engineering report (PER) prepared by Stahly Engineering, identified the need to upgrade its wastewater treatment facility. A new total retention lagoon system was constructed in 2011 to serve the town. However, the lagoon system was physically undersized for current flows and reached its hydraulic capacity in 2015 requiring it to discharge to an adjacent field under discharge permit MT0020516. Town personnel later improvised a piping system in order to intermittently discharge effluent at the original Beaver Creek outfall adjacent to the aerated lagoon. Since the system was not designed to be a discharging facility it does not meet several Montana Department of Environmental Quality (MDEQ) design standards, nor is it capable of meeting the required discharge limits. The Town has received 14 violation notices from the MDEQ since the current batch discharge system was improvised. In addition, the evaporative lagoons have areas with floating liners, which both reduces the storage capacity of the cells and can lead to liner failure. The evaporative lagoons were designed in a stepped configuration and flow between cells is through sloped piping with fixed inverts. This interconnecting piping design does not allow any cell to be bypassed for repair or sludge removal and the exposed piping becomes clogged with ice during cold months. Lastly, the existing facility lacks a disinfection system and an effluent flow measuring structure which are necessary for discharging facilities.

The proposed project consists of re-purposing the existing evaporation lagoons into storage lagoons; constructing a center pivot system for the land application of treated effluent; and adding disinfection, flow monitoring and effluent sampling systems. The project is proposed for construction in 2020.

The estimated total project cost (including administration, engineering, and construction) for the treatment system improvements is $2,196,000. The Town will fund the project through a $750,000 grant from the Treasure State Endowment Program (TSEP); a $125,000 grant from the Department of Natural Resources and Conservation; and a $1,321,000 loan from the Water Pollution Control State Revolving Fund (WPCSRF) loan program (2.5% interest rate; 30-year term). Of this loan amount $350,000 will be forgiven at the end of the project.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted because of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, growth, and sludge disposal were also assessed. No significant long-term environmental impacts were identified.

Under Montana law, (75-6-112, MCA), no person may construct, extend, or use a public sewage system until DEQ has reviewed and approved the plans and specifications for the project. Under the Montana Water Pollution Control State Revolving Fund Act, DEQ may loan money to municipalities for construction of public sewage systems.

The DEQ, Engineering Bureau, has prepared this Environmental Assessment to satisfy the requirements of the Montana Environmental Policy Act (MEPA) and the National Environmental Policy Act (NEPA).

D. COMMENT PERIOD

Thirty (30) calendar days.

II. PURPOSE OF AND NEED FOR ACTION

A new total retention lagoon system was constructed in 2011 to serve the Town of Wibaux. At that time, the primary aerated lagoon cell was rehabilitated with new aeration piping and blowers and a smaller lagoon cell was decommissioned. A transfer lift station was installed to convey the treated effluent to a new three-cell evaporation system located one mile north of Town. However, the evaporative ponds were physically undersized for current flows and reached their hydraulic capacity, requiring the system to discharge in 2015. While the Town was able to obtain a discharge permit (MT0020516), the facility was not designed to be a discharging system and therefore does not meet several Montana Department of Environmental Quality (MDEQ) design standards and is not capable of meeting the required discharge limits. The Town is in violation of its discharge permit and has received 14 violation notices from the MDEQ since the current batch discharge system was improvised. In addition, the existing facility lacks a disinfection system and effluent flow measuring structure which are necessary for discharging facilities.

The proposed Wibaux wastewater treatment plant (WWTP) improvements will retain usage of the single-cell aerated lagoon and will re-purpose the three existing evaporation lagoons into storage cells. Other improvements will include construction of a center pivot system for the land application of treated effluent on nearby State land, a sodium hypochlorite disinfection system, influent and effluent flow monitoring devices, and an effluent sampling system.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

Alternatives for treatment and disposal were considered separately from each other.

A. TREATMENT ALTERNATIVES

Four alternatives for addressing the Town's treatment system needs were evaluated. These include:

- T-0. No Action
- T-1. Aerated Cell for Land Application
- T-2. Facultative Lagoons with Polishing System
- T-3. Mechanical Treatment Plant

T-0 NO ACTION – The no action alternative would mean making no improvements to the system. There are numerous system deficiencies that have resulted in permit violations that will continue to occur. The expected growth in the area will only exacerbate the problems and violations will continue and eventually lead to fines and penalties by the MDEQ. The no action alternative is not considered a viable option and was not given further consideration.

T-1 AERATED CELL FOR LAND APPLICATION – Aerated lagoons use mechanical means to provide oxygen to the water column. This allows these systems to be constructed with operating depths of 10 to 15 feet and require less area and volumetric capacity to provide adequate treatment. Under this alternative, the Town's existing aerated lagoon is already adequately sized to meet the MDEQ design requirements for systems that utilize land application for the disposal of treated effluent. Therefore, no improvements would be needed for the aerated lagoon, but the existing evaporative cells would need to be modified and re-purposed to serve as storage ponds to hold treated effluent during the non-irrigation season. The new storage ponds would be modified with subgrade drains (to prevent the liner from floating), raised dikes and extended liners to increase storage capacity, and improved interconnecting piping for better operability. Additional improvements would include lift station improvements, influent and effluent flow monitoring and a liquid sodium hypochlorite disinfection system. This alternative is a viable option and will be given further consideration.

T-2 FACULTATIVE LAGOONS WITH POLISHING SYSTEM – A common form of treatment in eastern Montana, facultative lagoons have a large surface area with a maximum operating depth of 8 feet. These systems

rely on natural aeration via wind and algae. These lagoons are stratified into layers with aerobic treatment occurring at the surface and anaerobic treatment occurring near the bottom of the cell. On their own these systems do not remove ammonia very well so a packaged, modular, fixed-film treatment system would be added after the facultative lagoons. The advantage of this configuration is the polishing cell would be expandable for growth and the fixed film material contains a high concentration of microorganisms for the removal of ammonia to meet the required discharge limits. Thirty (30) acres of land would be required next to the existing evaporative lagoons for construction of this system. This alternative is a viable option and will be given further consideration.

T-3 MECHANICAL TREATMENT PLANT – Mechanical treatment plants use activated sludge technology and can be configured to create a variety of environmental conditions for the removal of carbon, nitrogen, and phosphorous. Very high treatment levels can be achieved to meet permit limits, but operational complexity and cost are a disadvantage. A Sequencing Batch Reactor (SBR) facility was considered for Wibaux. SBR systems are fill and draw activated sludge wastewater treatment systems that utilize a single basin for treatment and clarification. This results in a smaller "footprint" than typically needed for a conventional activated sludge facility since separate secondary clarifier basins are unnecessary. To provide continuous treatment, SBR systems typically contain two or more concrete basins that are operated with alternating cycles. SBRs generally contain the following phases of operation, which occur sequentially on a cyclical basis: fill, react, settle, decant, and idle. As the wastewater enters the basin it will be exposed to anaerobic, aerobic, and anoxic conditions that will result in carbon, nitrogen and even some phosphorus removal. After treatment, the basin content would be allowed to settle and the supernatant (clear water) would be decanted from the surface and discharged. This alternative would require about 2 acres of land which is available at the existing aerated lagoon site. This alternative is a viable option and will be given further consideration.

B. DISPOSAL ALTERNATIVES

Four alternatives for addressing the Town's disposal needs were evaluated. These included:

D-0. No Action
D-1. Beaver Creek Discharge
D-2. Land Application (Spray Irrigation)
D-3. Total Retention (Evaporation)

D-0 NO ACTION – This alternative would continue to utilize the existing make-shift surface piping to discharge into Beaver Creek. A preliminary evaluation of nutrient limits for Beaver Creek shows that stringent limits are likely to apply and this alternative would lead to continued permit violations and is not given further consideration.

D-1 BEAVER CREEK DISCHARGE - This alternative includes a buried piping system to convey the treated effluent from the treatment site to the current discharge permit location. The pipe would parallel the existing force main that conveys water from the existing aerated lagoon site to the new facultative lagoon location. A pressure system would be constructed and include a lift station with force main that meet MDEQ requirements. A UV disinfection system would be utilized for a continuously discharging facility. This alternative is viable when paired with a mechanical treatment plant or a properly sized lagoon system, and will be given further consideration.

D-2 LAND APPLICATION (SPRAY IRRIGATION) - This alternative uses a spray irrigation system for disposal of treated effluent, thereby eliminating the need for a wastewater discharge permit and the uncertainties associated with changing water quality regulations in Beaver Creek. Treated effluent is stored in ponds during the winter and then pumped to an agricultural area during the growing season (mid-May through September). It is proposed that a seed or fodder crop be irrigated through use of an automated center pivot irrigation system. Approximately 60 acres of land will be required for the irrigation system and an additional 6 acres will be required for re-purposing the existing evaporative lagoons into an adequately-sized storage lagoon. This alternative is viable, and will be given further consideration.

D-3 TOTAL RETENTION (EVAPORATION) – This alternative uses the area of all lagoon cells to evaporate the treated effluent. These systems are much larger than other lagoon-type systems and require substantially more land area. In addition to the existing cells (14 acres), an additional 50 - 60 acres of evaporation cells would be required to implement a functioning total retention system for the current and expected design flows. This alternative is viable, and will be given further consideration.

C. COST COMPARISON - PRESENT WORTH ANALYSIS

The present worth analysis is a means of comparing alternatives in present day dollars and can be used to determine the most cost-effective alternative. An alternative with low initial capital cost may not be the most cost-efficient project if high monthly operation and maintenance costs occur over the life of the alternative. A 0.2% interest factor over the 20-year planning period was used in the analysis. Table 1 provides a summary of the present worth analysis of the three feasible treatment alternatives. Table 2 provides a summary of the present worth analysis of the three feasible disposal options.

TABLE 1 - ECONOMIC EVALUATION OF TREATMENT ALTERNATIVES

Alternative	Total Capital Cost	Present Worth of Annual O&M Cost Increase	Present Worth of Salvage Value	Net Present Worth
T-1: Aerated Lagoon & Storage Cells	$1,119,000	$45,780	$214,000	$950,500
T-2: Facultative Lagoon & Polishing System	$4,109,000	$214,000	$760,000	$3,564,000
T-3: Mechanical Plant	$4,862,000	$2,980,000	$458,000	$7,385,000

TABLE 2 - ECONOMIC EVALUATION OF DISPOSAL OPTIONS

Alternative	Total Capital Cost	Present Worth of Annual O&M Cost Increase	Present Worth of Salvage Value	Present Worth of O&M plus Capital
D-1: Beaver Creek Outfall	$795,000	$290,000	$150,000	$935,000
D-2: Land Application	$1,039,000	$370,000	$124,000	$1,284,000
D-3: Total Retention & Evaporation	$5,972,000	$77,000	$793,000	$5,255,000

D. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

Selection of the preferred alternative was based upon several criteria, both monetary and non-monetary. The ranking criteria considered are shown in Table 3. The viable treatment and disposal alternatives were compared with respect to financial feasibility, technical feasibility, operation and maintenance considerations, public health and safety, environmental impacts, and public comment. Each alternative was assigned a ranking score of 0 to 10 for each category, with 0 being the least favorable and 10 being the most favorable. The ranking factors were then divided into the relative weight of importance assigned to each evaluation criteria, with the criteria most important to the Town receiving higher weighting. The weighted rank scores were then summed, resulting in a total score, the greatest score indicating the preferred alternatives.

TABLE 3 –WASTEWATER TREATMENT & DISPOSAL ALTERNATIVES RANKING

Criterion		Alternative T-1		Alternative T-2		Alternative T-3		Alternative D-1		Alternative D-2		Alternative D-3	
	Weight	Score	Points	Score	Points	Score	Points	Score	Points	Score	Points	Score	Points
Financial Feasibility	10	8	80	4	40	0	0	8	80	7	70	0	0
Technical Feasibility	5	8	40	6	30	5	25	7	35	8	40	2	10
Operations and Maintenance Considerations	5	9	45	8	40	1	5	8	40	6	30	9	45
Public Health and Safety	7	7	49	8	56	9	63	7	49	10	70	9	63
Environmental Impacts	6	7	42	5	30	8	48	5	30	8	48	6	36
Public Comment	5	8	40	5	25	1	5	7	35	9	45	3	15
TOTAL SCORE			**296**		**221**		**146**		**269**		**303**		**169**

The decision matrix shows that the preferred treatment alternative is T-1, aerated lagoon and storage cells. This alternative ranked higher than the other treatment alternatives primarily due to cost, technical feasibility, and public comment, in comparison to the other alternatives considered. The preferred disposal alternative is D-2, land application. This alternative ranked higher than the other disposal alternatives primarily due to technical feasibility, public health and safety, environmental impacts, and public comment, in comparison to the other disposal alternatives considered.

The estimated total project cost (including administration, engineering, and construction) for the treatment and disposal improvements is $2,196,000. The Town will fund the project through a $750,000 grant from the Treasure State Endowment Program (TSEP); a $125,000 grant from the Department of Natural Resources and Conservation; and a $1,321,000 loan from the Water Pollution

Control State Revolving Fund (WPCSRF) loan program (2.5% interest rate; 30-year term). Of this loan amount, $350,000 will be forgiven at the end of the project.

The average residential sewer rate in Wibaux is currently $55.93 per month. This rate will increase by $21.29 per month because of the proposed project, resulting in an average monthly residential sewer rate of $77.22. This is an increase of 38 percent. The financial impact of this project on the system users is shown in Table 4. The proposed project will result in a monthly sewer cost per household that is 2.88% of the monthly median household income. Based on EPA guidance for project affordability, the increased sewer rate may pose an economic hardship on some households in the Town of Wibaux.

TABLE 4 - PROJECT AFFORDABILITY

Monthly sewer user cost	$77.22
Monthly median household income (mMHI)[1]	$2,677.67
User rate as a percentage of mMHI	2.88%

[1] Based on US Census Bureau 2010 data.

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA AND MAPS

The Town of Wibaux is located along US Interstate 94, approximately 7 miles west of the Montana / North Dakota border (see Figure 1). Wibaux's boundary and planning area are shown in Figure 2. This area includes the incorporated limits of the Town of Wibaux, the wastewater treatment system, and some surrounding agricultural lands. Figure 3 shows Wibaux's existing aerated lagoon located north of town just across Interstate 94, the route of the existing force main, and the existing evaporative ponds, located approximately 0.75 miles northeast, which will be re-purposed into storage lagoons. The proposed irrigation site and the re-purposed storage ponds are shown on Figure 4.

B. POPULATION AND FLOW PROJECTIONS

Trends in regional oil and gas development make predicting the population growth for the Town of Wibaux difficult over a 20-year planning period. The town has experienced significant growth in the 1980s with considerable declines throughout the 1990s and 2000s. The population has begun to rebound once again since 2010. The Preliminary Engineering Report (PER) uses a moderate estimate of 0.8% growth per year for Wibaux. The current population served by Wibaux's WWTP is 650 people and the projected 2039 population is 750. This number allows for residential growth as well as rapid growth that could occur with something like an oil staging facility.

Since the treatment system does not have flow monitoring facilities a portable flow measuring device was installed at the end of the gravity collection system. The device recorded continuous flows for 55 days from late April through late June. During this time period the average daily flow was approximately 55,000 gallons per day (gpd), or 85 gallons per day per capita (gpcd). For design purposes a conservative value of 100 gpcd wastewater generation with the

design population of 750 results in a 2039 design flow of 75,000 gpd. The existing collection has more than adequate capacity to handle the projected 20-year design flows. Table 5 summarizes current and projected population and average daily flow data.

TABLE 5 – EXISTING AND PROJECTED POPULATION AND WASTEWATER FLOWS

Year	Population	Average Daily Flow (gal/day)
2019	650	55,000
2039	750	75,000

C. NATURAL FEATURES

Topography in the area is mostly flat with drainage occurring towards Beaver Creek which runs from south to north through town. Nearby soils are generally moderately deep, well-drained silty clays and fine sandy loams that support a variety of irrigated and dryland crops. The soils in the area have a low sodium absorption ratio (SAR) and salinity which indicates that crop irrigation is sustainable. These soils are typically found in floodplains, alluvial fans, and stream terraces. Oil was struck in the Pine Unit field in 1951 and continues to produce to this day. The Town of Wibaux currently discharges its wastewater lagoon effluent to Beaver Creek which flows into the Little Missouri River in North Dakota.

Groundwater near the aerated lagoon ranges from 2 to 5 feet below the ground surface and is considerably deeper near the evaporation lagoons ranging from 70 to 150 below the ground surface.

Wibaux's climate is classified as semi-arid. The average high temperature in the Wibaux area is 82°F, but can occasionally top 100°F during the summer months. The average low temperature is approximately 28°F, with periods of sub-zero temperatures at times during the winter months. The average annual precipitation rate is 14.55 inches per year, with half of that falling during the months of May through July. The average evaporation rate in the area is approximately 34 inches per year.

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use/Prime Farmland – The area surrounding the Town of Wibaux is primarily agricultural including cultivated farmland, hay land, or livestock pasture. The project site and surrounding lands are un-zoned, non-qualified agricultural land. The new wastewater spray irrigation site will be located almost 1-mile northwest of the existing evaporative ponds on State owned property that the Town will lease. None of the land near the location of the new storage lagoons or irrigation site is classified as prime farmland. It is anticipated that new storage cell will be constructed entirely

within the existing evaporative cell boundaries. However, should the re-purposing of the existing evaporative cells encroach on nearby land that is classified as "farmland of state wide importance," a Natural Resource Conservation Service AD-1006 form will need to be completed for the project.

2. Floodplains – Based on floodplain maps for the area, the new storage lagoons and irrigation site will not be located within a mapped floodplain. The Department of Natural Resources was contacted regarding this project and their comments are summarized at the end of this report.

3. Wetlands – Based on a search of the United States Fish & Wildlife Service's on-line wetlands inventory there are wetlands within one mile of the proposed project site, but no wetlands within the proposed construction areas. The Army Corps of Engineers was contacted regarding the proposed improvements and their comments are summarized at the end of this report.

4. Cultural Resources and Historical Sites – Due to previously disturbed conditions, no impacts to cultural resources are anticipated. All construction activity will occur on previously disturbed ground. No structures will be impacted. The State Historical Preservation Office was contacted regarding the proposed improvements and their comments are summarized at the end of this report.

5. Fish and Wildlife – Elimination of the discharge to Beaver Creek will be beneficial to fish, wildlife, and aquatic habitat. Some of the species of concern identified by the Montana Natural Heritage Program for Wibaux County include: the Hoary Bat, the Little Brown Myotis, the Northern Long-eared Bat; many types of birds including: Baird's Sparrow, Great Blue Heron, Least Tern, Golden Eagle, Ferruginous Hawk, the Greater Sage-Grouse, and Whooping Crane; and many types of fish including: Sturgeon Chub, Paddlefish, Sauger, Pallid Sturgeon. The project is not located within any designated Sage Grouse habitat. The Montana Fish Wildlife & Parks and the U.S. Fish and Wildlife Services were contacted regarding the proposed improvements and their comments are summarized at the end of this report.

6. Water Quality – The wastewater treatment plant currently discharges to Beaver Creek under general discharge permit MT0020516. Beaver Creek is classified as a C-3 water. These waters are to be maintained suitable for bathing, swimming, and recreation; growth and propagation of non-salmonid fishes and associated aquatic life, waterfowl, and furbearers. The quality of these waters is naturally marginal for drinking, culinary, and food processing purposes, agriculture, and industrial water supply. There are concerns that any future discharge permits will contain ammonia and total nitrogen limits that the lagoon system will not be capable of meeting.

   While the proposed improvements to the wastewater treatment system will eliminate the need to discharge to Beaver Creek, the Town may retain their existing discharge permit for emergency purposes. Beaver Creek, at the point of discharge, is not listed on the 303(d) list as impaired for

nutrients. Furthermore, it is a lagoon facility that is not designed to actively remove nutrients so the facility currently qualifies for a variance from specific numerical limits for both nitrogen and phosphorus.

7. Air Quality – Short-term negative impacts on air quality are expected to occur during construction from heavy equipment in the form of dust and exhaust fumes. Proper construction practices will minimize this problem. Project specifications will require dust control. No long-term impacts to air quality will occur.

8. Public Health – Public health will not be negatively affected by the proposed project. Elimination of the discharge to Beaver Creek will reduce the potential to pollute surface water and groundwater. This will benefit downstream users such as irrigators and recreationalists. The effluent will be disinfected and a buffer zone will be maintained from the end of the irrigation pivot to the fence to protect public health.

9. Energy – The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable, but will be a short-term commitment. There will be a long-term increase in energy consumption at the new storage lagoons due to the electrical costs associated with pumping effluent from the lagoon to the pivot, but it will be minimized as much as possible by using energy-efficient pumps.

10. Noise – Short-term impacts from excessive noise levels may occur during construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances. No significant long-term impacts from noise should occur.

11. Sludge Disposal – Since the improvements will occur at the evaporative ponds which are still relatively new, it is not anticipated that much, if any, sludge will need to be removed with the proposed project. If sludge is removed, it will likely be taken to the Oaks Disposal Services site northwest of Glendive or to the Fallon County Landfill for disposal in accordance with EPA's 258 Regulations *Criteria for Municipal Solid Waste Landfills.* Depending on the final disposal site, the governing regulations which contain specific numeric limits and other requirements for heavy metals, pathogens, and vector attraction must be met. The final sludge disposal plan utilizing this information must be submitted to the DEQ for review and approval prior to final sludge disposal, which will need to be identified in the project plans and specifications.

12. Environmental Justice – Environmental Justice Executive Order 12898: The proposed project will not result in disproportionately high or adverse human health or environmental effects on minority or low-income populations. All base sewer rates will be increased equally and all customers and residents will benefit from improvements to the wastewater system. No disproportionate effects among any portion of the community would be expected.

13. Wild and Scenic River Act – The proposed project will not impact any rivers designated as wild and scenic by Congress or the Secretary of the Interior.

14. Growth – Trends in regional oil and gas development make predicting the population growth for the Town of Wibaux difficult over a 20-year planning period. The town has experienced significant growth in the 1970s with declines occurring over the next twenty years. The population has stabilized in recent years and is even experiencing some growth. The proposed wastewater improvements will be designed to serve a 20-year design population of 750, an increase of 0.8 percent per year over the current population which is moderate for a typical eastern Montana town. The Town wants to invest in a reasonable amount of capacity to accommodate any growth since improvements are needed anyway.

15. Cumulative Effects – The increased capacity at the wastewater treatment plant may result in secondary and/or cumulative impacts due to growth of the community and expansion of the service area. Secondary impacts associated with housing, commercial development, solid waste, transportation, utilities, air quality, water utilization, and possible loss of agricultural and rural lands may occur. These secondary impacts are uncertain at this time, and therefore cannot be directly addressed in the EA. However, these impacts will need to be managed and minimized as much as possible through proper community planning. There are several existing city, county and state regulations already in place (i.e., zoning regulations, comprehensive planning, subdivision laws, etc.) that control the density and development of property with regards to water supply, sewage disposal, solid waste disposal, transportation, and storm drainage.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction-related impacts (i.e., noise, dust, etc.) will occur, but should be minimized through proper construction management. Energy consumption during construction and as a long-term need for irrigation pumping cannot be avoided. The deepening of the evaporative ponds to serve as a storage lagoon may impact approximately 6 acres of town-owned land at the evaporative pond site. Some of this land on the south end is classified as "farmland of state wide importance" and will require the review and approval of USDA Farmland Conversion Impact Rating Form AD-1006 if impacted.

VI. PUBLIC PARTICIPATION

A public hearing discussing the need for the project, the alternatives considered (including estimated costs); the proposed wastewater system improvements; proposed funding scenarios; and user rates was held on March 21, 2018. There were no substantive comments received. The Town residents through their previous support of the Town Growth Policy are in support of modern and functional infrastructure and over 60 residents have signed a letter supporting the grant and loan funding applications to improve the town's wastewater system.

VII. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES

All proposed improvements will be designed to meet state standards in accordance with Circular DEQ-2, and will be constructed using standard construction methods. Best management practices will be implemented to minimize or eliminate pollutants during construction. No additional permits will be required from the State Revolving Fund (SRF) section of DEQ for this project after the review of the submitted plans and specifications. However, coverage under the storm water general discharge permit and groundwater dewatering discharge permit, if necessary, must be obtained from the DEQ Water Protection Bureau prior to the beginning of construction. A 124 Permit from the Department of Fish, Wildlife and Parks, a 404 Permit from the U.S. Corps of Engineers, and a 318 Authorization from the Department of Environment Quality will be obtained for any work that occurs in a streambed or (jurisdictional) wetlands, should it become necessary.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

Rationale for Recommendation: Through this EA, DEQ has verified that none of the adverse impacts of the proposed Town of Wibaux wastewater improvements project are significant. Therefore, an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609, and 17.4.610. The EA is the appropriate level of analysis because none of the adverse effects of the impacts are significant.

IX. REFERENCE DOCUMENTS

The following documents have been utilized in the environmental review of this project and are part of the project file:

1. Town of Wibaux 2018 Wastewater System Preliminary Engineering Report, prepared by Stahly Engineering & Associates.

2. Uniform Application Form for Montana Public Facility Projects, May 2018, prepared by Town of Wibaux.

X. AGENCIES CONSULTED

As part of the Preliminary Engineering Report (PER) process, the following agencies were contacted regarding the proposed construction of this project:

1. The U.S. Fish and Wildlife Service (USFWS) reviewed the proposed project and provided a list of threatened and endangered species within Wibaux County. The USFWS determined, based on the location within an existing agricultural setting, that they do not anticipate the project would result in adverse effects to listed, proposed, or candidate threatened or endangered species, or listed or proposed critical habitat. They stated that the proposed project could have potential effects to migratory birds and that the USFWS has developed conservation measures for avoiding and minimizing impacts to birds which should be incorporated into

the project design and construction, as appropriate.

2. The Montana Historical Society's State Historic Preservation Office (SHPO) reviewed the proposed project. They commented that if there will be no disturbance to structures over fifty years of age, there is low likelihood cultural properties will be impacted. They felt that a recommendation for a cultural resource inventory was unwarranted at that time. However, should structures need to be altered or cultural materials be inadvertently discovered during the project, SHPO must be contacted and the site investigated.

3. The U.S. Department of the Army Corps of Engineers (USCOE) provided comments on the proposed project. They indicated that if any work is proposed below the ordinary high-water mark of stream channels, lakes, or wetlands adjacent to these waters, then a Section 404 permit would apply and authorization from USCOE would be needed. The USCOE recommended that the project area should be evaluated for the presence of wetlands or waters of the US.

4. The Montana Department of Fish, Wildlife and Parks (FWP) reviewed the proposed project and did not have any comments.

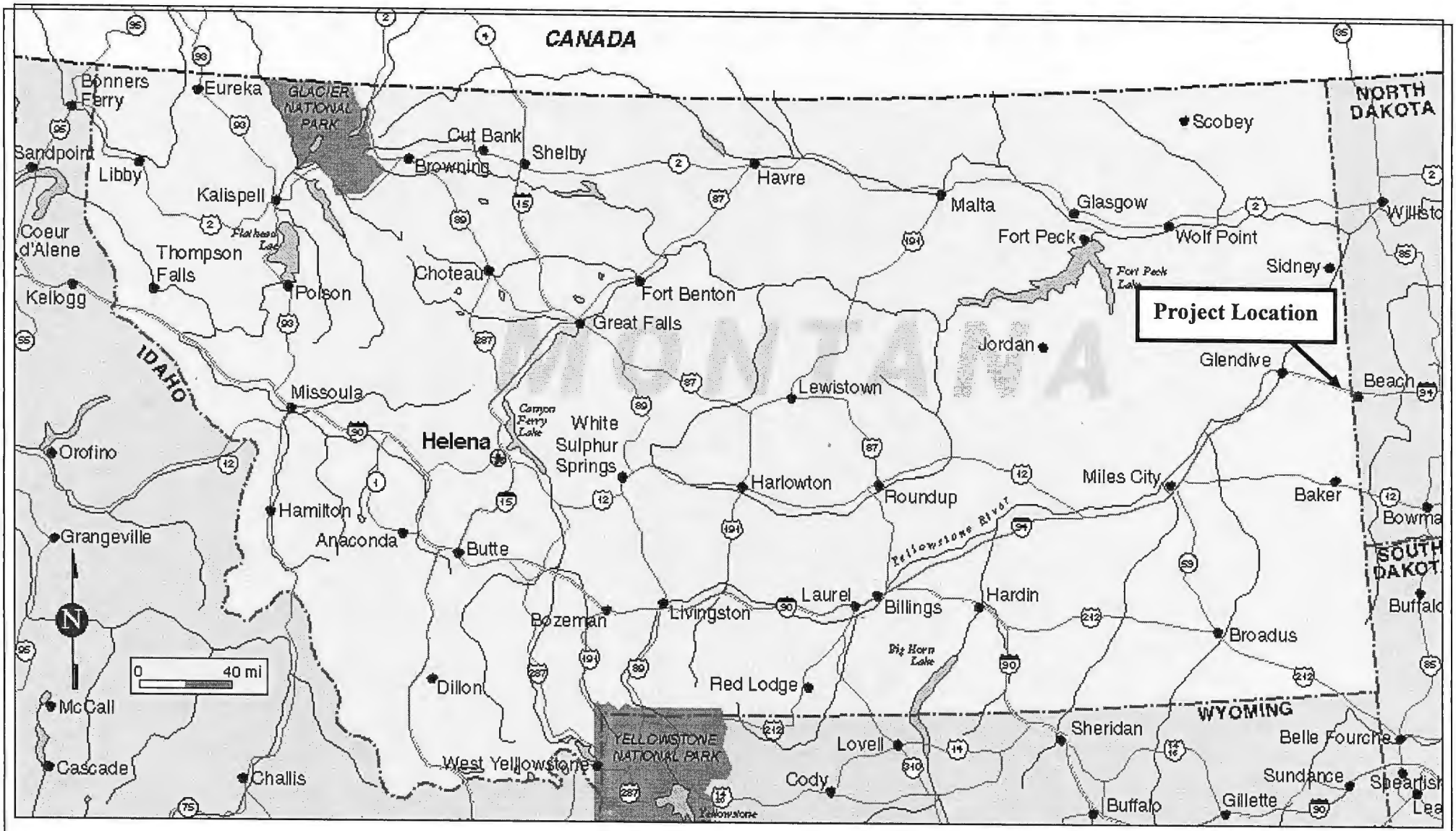
5. The Montana Department of Natural Resources and Conservation (DNRC) reviewed the proposed project and indicated that a floodplain permit was not needed.

EA Prepared by:

Mike Abrahamson, P.E. — Date: 1/8/20

EA Reviewed by:

Michele Marsh, P.E. — Date: 1/8/20



Montana Department of
ENVIRONMENTAL QUALITY

Figure 1. Site Location Map – Town of Wibaux

Figure 2 – Town Planning Area

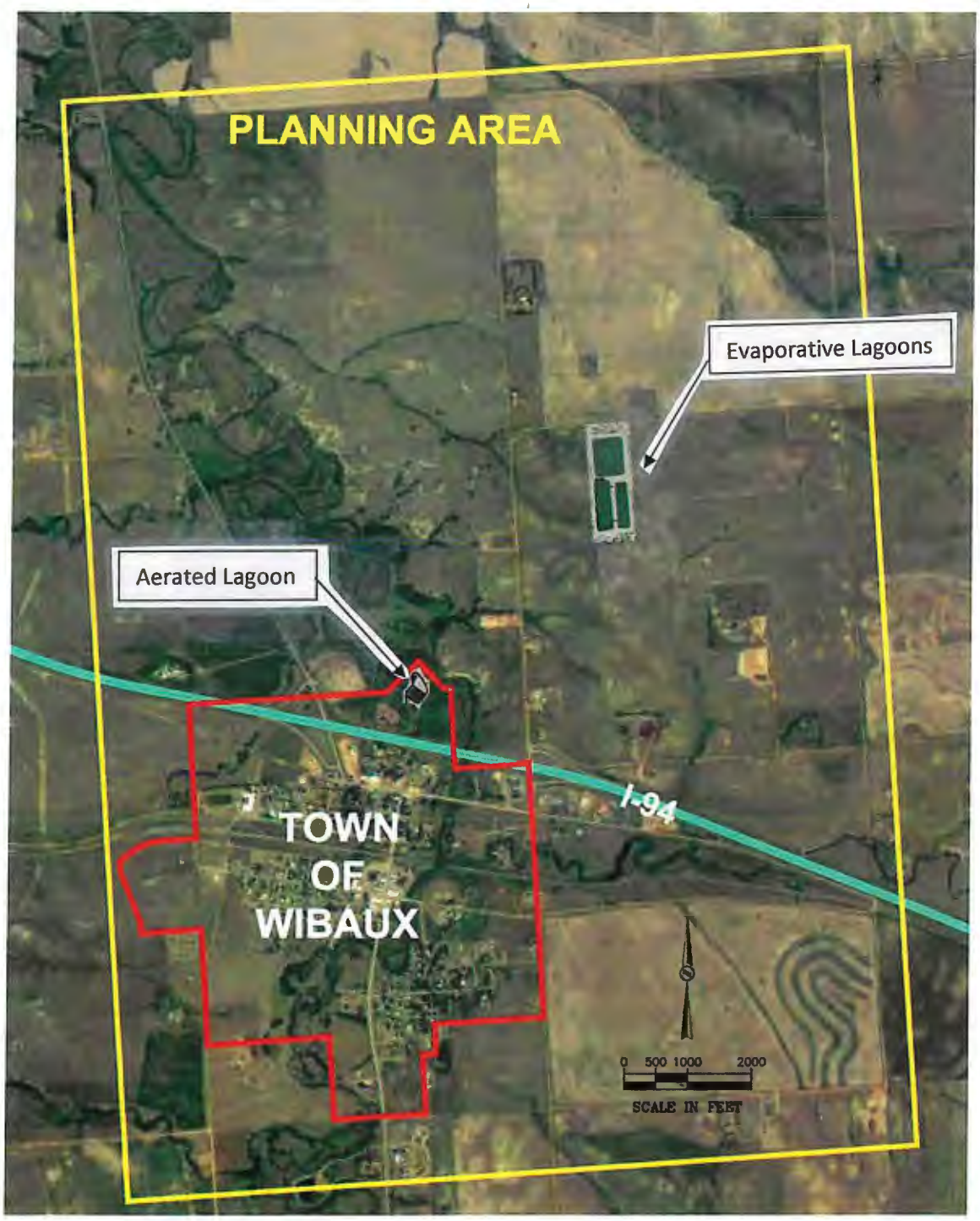
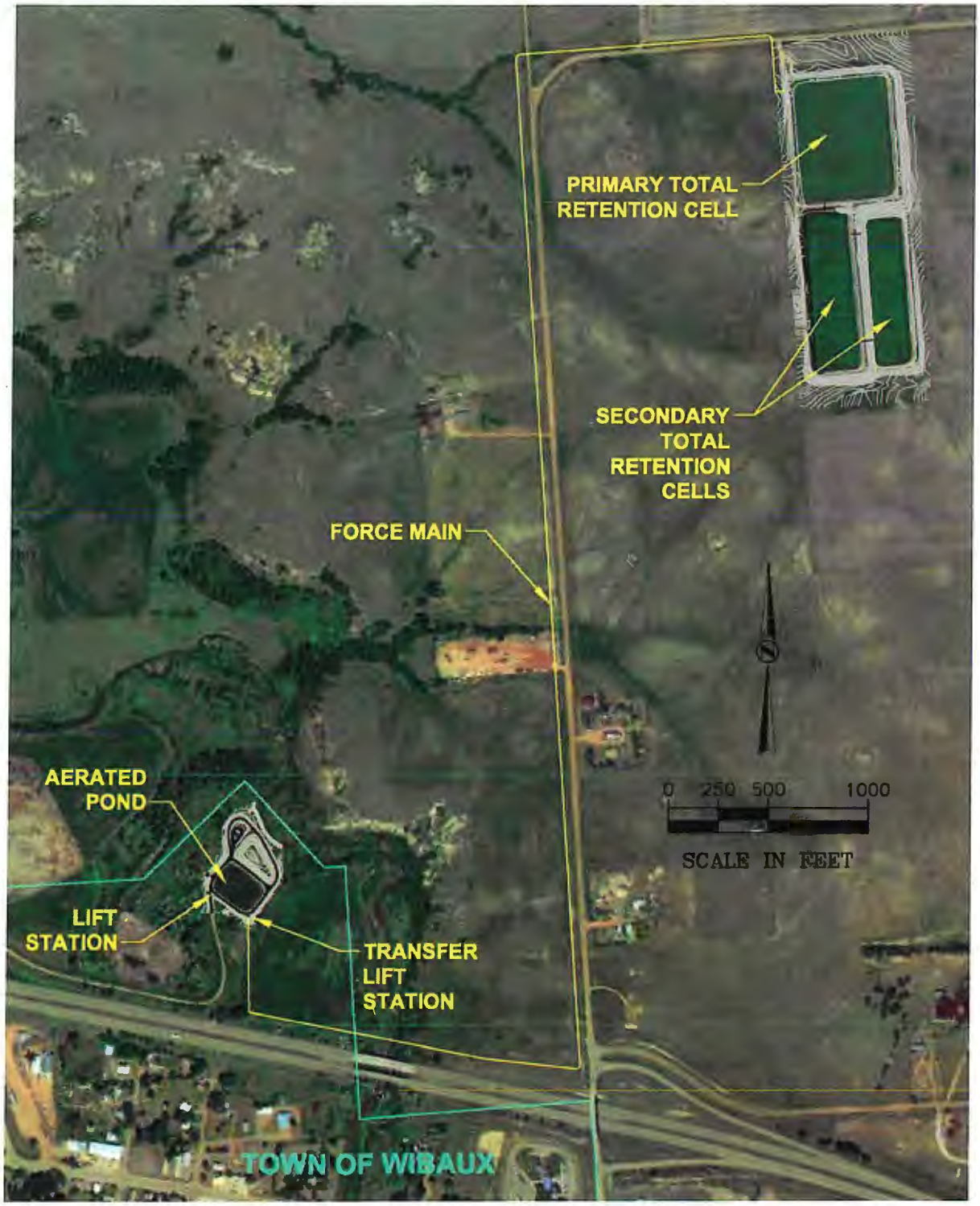


Figure 3 – Wastewater Treatment System Layout



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ISSUE/REVISION

No.	DATE	BY
1	####	####
DESCRIPTION		
####		
2		
DESCRIPTION		
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DESCRIPTION		
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DESCRIPTION		
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DESCRIPTION		

PRELIMINARY NOT FOR CONSTRUCTION

D-2 LAND APPLICATION WITH PIVOT IRRIGATION

WASTEWATER PER

TOWN OF WIBAUX
WIBAUX COUNTY, MONTANA

DESIGNED: SJS
DRAWN: SJS
CHECKED: RBW
DATE: 3/28/18

Figure 4

Finding of No Significant Impact
Resolution #2018-01

WHEREAS, the Town of Wibaux procured the services of Stahly Engineering and Associates, Inc. hereinafter referred as Stahly, to evaluate and make recommendations regarding the problems of the Town's wastewater treatment system and prepare a Preliminary Engineering Report according to the standards set forth by the State of Montana to cure the problems;

WHEREAS, the Preliminary Engineering Report prepared by Stahly also included an Environmental Assessment of the proposed improvements and recommended a Finding of No Significant Impact;

WHEREAS, the Town of Wibaux has held a duly advertised public meeting to accept public comments on environmental issues was requested, and the comments on the environmental assessment has been available for comment with the Town of Wibaux;

WHEREAS, the Town of Wibaux has considered the environmental assessment documentation and included a copy in the Preliminary Engineering Report;

THEREFORE, The Town of Wibaux does conclude with the recommendation of Stahly that in accordance with the Montana Environmental Protection Act (MEPA), the Town has satisfactorily evaluated any and all impacts of the proposed project on the environment and concurs with the recommendation and does now adopt a Finding of No Significant Impact. It is the Town's opinion that no further assessment is now necessary.

Dated this 2nd day of May 2018.

Signed: David L Bertelsen

Name: David L. Bertelsen

Title: Mayor

Attest: Debra Zinda

By: Debra Zinda, Clerk/Treasurer

Montana Department of Commerce
Treasure State Endowment Program
Environmental Assessment

Town of Wibaux, Montana
Wastewater Improvements

Proposed Action: The proposed project will make improvements to the existing wastewater treatment system over a one year construction duration as discussed below:

- Construction of a new storage lagoon cell south of the existing lagoon cells,
- Modifying evaporation ponds for storage capacity,
- Construction of a center pivot spray irrigation system northwest of the lagoons,
- Construction of a force main connecting the lagoons to the spray irrigation site.
- Miscellaneous related improvements including interconnecting piping, valves, and appurtances,

UNIFORM ENVIRONMENTAL CHECKLIST

A completed environmental checklist as contained in the Uniform Application for Montana Public Facility Projects, 10th Edition, begins on the next page.

As the engineer that prepared the preliminary engineering report, I, Ryan Rittal, P.E. have reviewed the information presented in this checklist and believe that it accurately identifies the environmental resources in the area and the potential impacts that the project could have on those resources. In addition, the required state and federal agencies were provided with the required information about the project and requested to provide comments on the proposed public facility project. Their comments have been incorporated into and attached to the Preliminary Engineering Report.

Engineer's Signature _____

Date: 3/6/18

Key Letter: N – No Impact/Not Applicable **B** – Potentially Beneficial **A** – Potentially Adverse
P – Approval/Permits Required **M** – Mitigation Required

PHYSICAL ENVIRONMENT	
KEY N	**1. Soil Suitability, Topographic and/or Geologic Constraints (e.g., soil slump, steep slopes, subsidence, seismic activity)** *Comments and Source of Information:* The majority of soils in the area are clay and are excellent for the construction of lagoons. There are no topographic and/or geologic constraints in the area of the proposed project. (Engineer)
KEY N	**2. Hazardous Facilities (e.g., power lines, EPA hazardous waste sites, acceptable distance from explosive and flammable hazards including chemical/ petrochemical storage tanks, underground fuel storage tanks, and related facilities such as natural gas storage facilities & propane storage tanks)** *Comments and Source of Information:* There are no known hazardous facilities within the general vicinity of the proposed project. (Engineer)
KEY N	**3. Effects of Project on Surrounding Air Quality or Any Kind of Effects of Existing Air Quality on Project (e.g., dust, odors, emissions)** *Comments and Source of Information:* There may be some temporary dust associated with the construction, however, dust control will be required as a part of the construction. There will be no long term impacts in regard to the surrounding air quality as a result of the project. (Engineer)
KEY N	**4. Groundwater Resources & Aquifers (e.g., quantity, quality, distribution, depth to ground water, sole source aquifers)** *Comments and Source of Information:* The proposed project is not anticipated to impact the groundwater resources and/or aquifers. (Engineer)
KEY B	**5. Surface Water/Water Quality, Quantity & Distribution (e.g., streams, lakes, storm runoff, irrigation systems, canals)** *Comments and Source of Information:* The proposed improvements will eliminate the discharge of undertreated sewage improving the local water quality and ending permit violations. (Engineer)
KEY N	**6. Floodplains & Floodplain Management (Identify any floodplains within one mile of the boundary of the project.)** *Comments and Source of Information*: Floodplain maps are included in the PER. A floodplain encompassing Beaver Creek is located approximately 0.5 mile west of the existing evaporation lagoons and proposed irrigation site but no part of the project will be inside of the floodplain. (Engineer, Montana DNRC)
KEY N	**7. Wetlands Protection (Identify any wetlands within one mile of the boundary of the project.)** *Comments and Source of Information:* A wetland map is included in the PER. There is a freshwater pond, adjacent to Beaver Creek, located 1,500 feet west of the proposed irrigation site but no wetlands exist in the project are. (Engineer)

KEY	
N	**8. Agricultural Lands, Production, & Farmland Protection (e.g., grazing, forestry, cropland, prime or unique agricultural lands) (Identify any prime or important farm ground or forest lands within one mile of the boundary of the project.)** *Comments and Source of Information:* The proposed project will require about 125 acres of additional land. State land located northwest of the existing lagoons is proposed for the new cell and can be leased from the state per conversations with the DNRC leasing section. This land is for seasonal grazing. Once the exact site is known, there may be a requirement to mitigate the loss of grazing habitat although DNRC did not identify this as a significant concern. As such, the land surrounding the proposed project area will not see a negative change in use as a result of the proposed project. (Engineer, Montana DNRC)
KEY	
B	**9. Vegetation & Wildlife Species & Habitats, Including Fish (e.g., terrestrial, avian and aquatic life and habitats)** *Comments and Source of Information:* The proposed project, by eliminating the partially treated sewage from the creek, may have several beneficial impacts to the aquatic life of the Beaver Creek. The major benefit is that wastewater effluent is removed from the Beaver Creek. (Engineer, Montana DNRC)
KEY	
N	**10. Unique, Endangered, Fragile, or Limited Environmental Resources, Including Endangered Species (e.g., plants, fish or wildlife)** *Comments and Source of Information:* There are some known unique, endangered, fragile, or limited environmental resources in the area, but they are not expected to be impacted according to the USF&W Service. Both the US Fish and Wildlife Service (US FWS) and the Montana Department of Fish, Wildlife, and Parks (Montana FWP) were asked to comment on the proposed project. The Montana FWP had no comments on the project and the USFWS noted that "Based on the location of this proposed project within an existing agricultural setting, we do not anticipate its implementation would result in adverse effects to listed, proposed, or candidate threatened or endangered species, or listed or proposed critical habitat." (US FWP, FWP)
KEY	
N	**11. Unique Natural Features (e.g., geologic features)** *Comments and Source of Information:* There are no known unique natural features that are anticipated to be impacted as a result of the proposed project. The State Historic Preservation Office (SHPO) was contacted and asked to comment on the proposed project. SHPO noted that "there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time." (Montana State Historic Preservation Office)
KEY	
N	12. **Access to, and Quality of, Recreational & Wilderness Activities, Public Lands and Waterways (including Federally Designated Wild & Scenic Rivers), and Public Open Space** *Comments and Source of Information:* There are no anticipated impacts to the access or quality of recreational and wilderness activities, public lands and waterways, or public open spaces as a result of the proposed project. (US FWS, Engineer)

HUMAN POPULATION	
KEY N	**1. Visual Quality – Coherence, Diversity, Compatibility of Use and Scale, Aesthetics** *Comments and Source of Information:* No negative impacts are anticipated on visual quality. The new irrigation system may be visible from some roads, but overall it is located in a limited access area and will not be noticed. There will be no other visual changes as a result of the proposed project. (Engineer)
KEY N	**2. Nuisances (e.g., glare, fumes)** *Comments and Source of Information:* There are no anticipated nuisances associated with the proposed project. (Engineer)
KEY N	**3. Noise – suitable separation between noise sensitive activities (such as residential areas) and major noise sources (aircraft, highways & railroads)** *Comments and Source of Information:* There may be some temporary noise during construction of the proposed project. However, construct ion operation hours will be limited to 7:00 AM to 7:00 PM. No other long term impacts to noise are anticipated upon completion of the project. (Engineer)
KEY N	**4. Historic Properties, Cultural, and Archaeological Resources** *Comments and Source of Information:* The State Historic Preservation Office (SHPO) was contacted and asked to comment on the proposed project. SHPO noted that "there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time." (Montana State Historic Preservation Office)
KEY N	**5. Changes in Demographic (population) Characteristics (e.g., quantity, distribution, density)** *Comments and Source of Information:* The proposed project is not anticipated to impact demographic characteristics. (Engineer)
KEY N	**6. Environmental Justice – (Does the project avoid placing lower income households in areas where environmental degradation has occurred, such as adjacent to brownfield sites?)** *Comments and Source of Information:* This project does not locate or cause the location of any lower income households into unacceptable areas. (Engineer)
KEY N	**7. General Housing Conditions – Quality, Quantity, Affordability** *Comments and Source of Information:* The proposed project is not anticipated to impact general housing conditions. (Engineer)
KEY N	**8. Displacement or Relocation of Businesses or Residents** *Comments and Source of Information:* The proposed project will not require displacement or relocation of businesses and/or residents. (Engineer)
KEY B	**9. Public Health and Safety** *Comments and Source of Information:* The proposed project will eliminate a source of contamination from Beaver Creek and is a benefit. (Engineer)

KEY	
N	**10. Lead Based Paint and/or Asbestos** *Comments and Source of Information:* The proposed project is not anticipated to involve the handling of any lead based paint and/or asbestos. (Engineer)
KEY N	**11. Local Employment & Income Patterns – Quantity and Distribution of Employment, Economic Impact** *Comments and Source of Information:* There are no anticipated impacts to local employment or income patterns directly attributed to the proposed project. (Engineer)
KEY N	**12. Local & State Tax Base & Revenues** *Comments and Source of Information:* There are no anticipated impacts to the local and state tax base and revenues directly attributed as a result of the proposed project. However, the project will avoid eventual fines from discharge permit violations. (Engineer)
KEY N	**13. Educational Facilities - Schools, Colleges, Universities** *Comments and Source of Information:* There is no anticipated impact to the educational facilities as a direct result of the proposed project.
KEY N	**14. Commercial and Industrial Facilities – Production & Activity, Growth or Decline** *Comments and Source of Information:* There is no anticipated impact to the commercial and industrial facilities as a direct result of the proposed project.
KEY N	**15. Health Care – Medical Services** *Comments and Source of Information:* There is no anticipated impact to the health care facilities as a direct result of the proposed project.
KEY N	**16. Social Services – Governmental Services {e.g., demand on)** *Comments and Source of Information:* There is no anticipated impact to social services as a direct result of the proposed project.
KEY N	**17. Social Structures & Mores {Standards of Social Conduct/Social Conventions)** *Comments and Source of Information:* All work on the proposed project will be paid equally by all residents using an equivalent dwelling unit (EDU) schedule to increase cost of service to all users proportionally. (Engineer)
KEY N	**18. Land Use Compatibility (e.g., growth, land use change, development activity, adjacent land uses and potential conflicts)** *Comments and Source of Information:* The proposed project provides excellent use of available land. The proposed irrigation will improve existing grazing. Improvements will be completed within existing owned areas and on land leased from the state. No change in land use will be required. (Engineer, NRCS)
KEY N	**19. Energy Resources – Consumption and Conservation** *Comments and Source of Information:* There is no anticipated change in energy resources as a direct result of the proposed project. (Engineer)

KEY	
N	**20. Solid Waste Management** *Comments and Source of Information:* There are no anticipated impacts to solid waste management as a result of the proposed project. (Engineer)
B	**21. Wastewater Treatment – Sewage System** *Comments and Source of Information:* The proposed project will be improving the wastewater facilities and will bring the plant into compliance with current state and federal standards. (Engineer)
N	**22. Storm Water – Surface Drainage** *Comments and Source of Information:* There are no anticipated impacts to storm water as a result of the proposed project. (Engineer)
B	**23. Community Water Supply** *Comments and Source of Information:* There are no anticipated impacts to the public water supply as a result of the proposed project. With the elimination of a discharge to Beaver Creek, local water quality should improve. (Engineer)
N	**24. Public Safety – Police** *Comments and Source of Information:* There are no anticipated impacts to police as a result of the proposed project. (Engineer)
N	**25. Fire Protection – Hazards** *Comments and Source of Information:* There are no anticipated impacts to fire protection as a result of the proposed project. (Engineer)
N	**26. Emergency Medical Services** *Comments and Source of Information:* There are no anticipated impacts to emergency medical services as a result of the proposed project. (Engineer)
N	**27. Parks, Playgrounds, & Open Space** *Comments and Source of Information:* There are no anticipated impacts to parks, playgrounds, and open spaces as a result of the proposed project. (Engineer)
N	**28. Cultural Facilities, Cultural Uniqueness & Diversity** *Comments and Source of Information:* There are no anticipated impacts to cultural facilities, cultural uniqueness, and diversity as a result of the proposed project. The State Historic Preservation Office (SHPO) was contacted and asked to comment on the proposed project. SHPO noted that "there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time." (SHPO)
N	**29. Transportation Networks and Traffic Flow Conflicts (e.g., rail; auto including local traffic; airport runway clear zones - avoidance of incompatible land use in airport runway clear zones)** *Comments and Source of Information:* There are no anticipated impacts to transportation as a result of the proposed project. (Engineer)

KEY		
B	30.	**Consistency with Local Ordinances, Resolutions, or Plans (e.g., conformance with local comprehensive plans, zoning, or capital improvement plans}** *Comments and Source of Information:* The proposed project is consistent with all local ordinances, resolutions, and plans. (Town of Wibaux)
KEY	31.	**Is There a Regulatory Action on Private Property Rights as a Result of this Project? (Consider options that reduce, minimize, or eliminate the regulation of private property rights.)**
N		*Comments and Source of Information:* There will be no regulatory action on private property as a result of the proposed project. (Engineer)

Alternatives

The Preliminary Engineering Report provides an Alternative Screening and Evaluation Process which considers all reasonable and economical alternatives for upgrading the existing wastewater treatment facility.

Alternatives considered were:

Treatment Alternatives
T-0: No Action
T-1: Aerated Cell for Land Application
T-2: Facultative Lagoons with Polishing System
T-3: Mechanical Treatment Plant

Disposal Alternatives
D-0: No Action
D-1: Beaver Creek Discharge
D-2: Spray Irrigation
D-3: Evaporation

After calculating project costs, operation and maintenance costs, and determining a present value cost, the options were ranked using a matrix scoring process. In conjunction with environmental considerations, the preferred alternatives were selected. Based on this analysis, the Town has determined that alternatives T-1 and D-2 are the best options for meeting both current and future environmental regulations and for providing the necessary capacity for Wibaux's future growth.

Mitigation

The checklist provided above finds no significant impacts to the environment resulting from this project. Best management practices (BMP's) will be implemented to prevent dust and storm water runoff during construction. The contract documents will contain these requirements. Sediment control fencing will be placed on the downhill edge of all disturbances. The storage ponds and proposed improvements are above the floodplain. The existing aerated pond and lift stations are protected by existing berms. USF&W has requested that we notify them of any nesting sites for several bird species if encountered during construction. All Circular DEQ-2 regulations for flood risk mitigation will be incorporated into the design. There are no wetlands near the improvements site. The removal of discharge to surface waters eliminates any impacts to fish and other aquatic species. Birds, ground animals, and wildlife visiting the site could be temporarily impacted during construction, but this is not expected due to their mobility—especially during the warmer summer months. There is no requirement for a cultural resource at this time. However, if cultural relics are encountered during construction, the Montana Historical Preservation Office will be contacted.

Is an Environmental Assessment (EA) or Environmental Impact Statement (EIS) required?

The Montana Environmental Policy Act requires than an environmental review be performed whenever a state agency takes an action; whenever that action is not exempt or excluded from MEPA; and whenever the action may impact the human environment. As this project is not anticipated to have a significant adverse effect, an EA is adequate for this project and it is recommended that the Town adopt this recommendation.

Public Involvement

The Preliminary Engineering Report (PER) process included a public participation effort that began in 2018. The findings of the PER were presented to the Town Council at a noticed public meeting on March 21, 2018. The Town Council members attended the meeting.

The agenda for this public meeting was to discuss:

a) The condition and capacity of the existing system
b) Existing and future discharge permit requirements
c) Design alternatives
d) Project Costs
e) User Rate Impacts
f) Environmental considerations
g) Project implementation

The conclusions of the City Council were:

a) The existing system is undersized, failing, and needs to be upgraded.
b) A Spray Irrigation System that used the existing aerated pond and modified storage cells was the best alternative for moving forward,

The availability of the Draft Uniform Environmental Checklist was advertised in the local newspaper starting on March 8, 2018 and continuing as required by TSEP requirements. Comments were accepted orally at the hearing and were allowed to be submitted in writing to Town of Wibaux, 109 1st Ave. SE, Wibaux, MT 59353 before March 21, 2018 at 5:00 pm. None were received. A public hearing was held on March 21, 2018 at 5:00 pm in the Town office to discuss the PER and the EA. No comments on the EA were received. The City Council approved the Environmental Assessment at a following Council meeting on May 2, 2018.

Person(s) Responsible for Preparing

Ryan Rittal, PE - Project Engineer at Stahly Engineering

Other Agencies

Army Corps of Engineers
Environmental Protection Agency (EPA)
Montana Department of Environmental Quality (MDEQ)
Department of Natural Resources and Conservation (DNRC)
Department of Fish, Wildlife and Parks (FWP)
State Historic Preservation Office (SHPO)
U.S Fish and Wildlife Service (USFWS)

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
HELENA REGULATORY OFFICE
10 WEST 15TH STREET, SUITE 2200
HELENA, MONTANA 59626

REPLY TO
ATTENTION OF

February 28, 2018

Regulatory Branch
Montana State Program
Corps No. **NWO-2018-00264-MTB**

Subject: Town of Wibaux - Wastewater Treatment Facility Improvements (Wibaux County)

Ryan Rittal
Stahly Engineering & Associates, Inc.
851 Bridger Drive, Suite 1
Bozeman, Montana 59715

Dear Mr. Rittal:

We are responding to your request for a review and written response identifying possible impacts and requirements from a proposed wastewater treatment upgrade project. Specifically, the Town of Wibaux is proposing the construction of new evaporation ponds, force main, and irrigation systems. The project is located at approximately Latitude 47.003889°, Longitude -104.165512°, near Beaver Creek, within Section 6, Township 14 N, Range 60 E, Wibaux, Wibaux County, Montana.

The mission of the U.S. Army Corps of Engineers (Corps) Regulatory Program is to protect the Nation's aquatic resources while allowing reasonable development through fair, flexible and balanced permit decisions. In particular, under Section 404 of the Clean Water Act, we work to protect the biological, physical, and chemical integrity of the Nation's aquatic resources. Projects are evaluated on a case-by-case basis to determine the potential benefits and detriments that may occur as a result of the proposal. In all cases an applicant must avoid and minimize impacts to aquatic resources to the greatest extent practicable.

Under the authority of Section 404 of the Clean Water Act (CWA), DA permits are required for the discharge of fill material into waters of the U.S. Waters of the U.S. include the area below the ordinary high water mark of stream channels and lakes or ponds connected to the tributary system, and wetlands adjacent to these waters. Isolated waters and wetlands, as well as man-made channels, may be waters of the U.S. in certain circumstances, which must be determined on a case-by-case basis.

Based on the information provided in your submittal, we are unable to ascertain if regulated activities are proposed or if jurisdictional waters of the U.S. are present within the project area. If the final design includes the placement of dredged or fill material in any jurisdictional area described above, or otherwise requires authorization by a DA

permit, please submit a permit application to this office prior to starting any work. The application package should include a delineation of waters of the United States and special aquatic sites, including wetlands within the project site. After a review of the materials submitted we will determine what type of permit, if any, will be required. In order to provide the necessary information you may use the Montana Joint Permit Application Form, found at the following address: http://www.dnrc.mt.gov/licenses-and-permits/stream-permitting. If you do not wish to use this form, or do not have internet access please contact our office at the address below to obtain more information.

Note that this letter is not a DA authorization to proceed. It only informs you of your need to obtain a DA permit if waters of the U.S. will be affected. If waters of the U.S. will not be affected by a jurisdictional activity a DA permit will not be required for the project.

Please refer to identification number **NWO-2018-00264-MTB** in any correspondence concerning this project. If you have any questions, please contact me at Post Office Box 7032, Billings, Montana 59103, by telephone at (406) 657-5910 or by email at Sage.L.Joyce@usace.army.mil.

Sincerely,

Sage L. Joyce
Regulatory Project Manager

Enclosures:

cc:
Town of Wibaux
PO Box 219
Wibaux, Montana 59353-9051

DEQ
Montana Department
of Environmental Quality

February 15, 2018

Mr. Ryan Rittal, P.E.
Project Manager
Stahly Engineering & Associates
851 Bridger Drive, Ste. 1
Bozeman, MT 59715

Re: Wibaux Wastewater System Improvements

Dear Mr. Rittal:

Thank you for the information and request for comments regarding the above referenced proposed project. Since the Department of Environmental Quality (DEQ) will be reviewing environmental documents, the engineering report, plans, and specifications for the proposed project and issuing an approval to construct the new facilities, those reviews will serve as DEQ's comments.

The reviews will be performed by either the Public Water Supply Program or, if DEQ funding is also proposed, the Water Pollution Control State Revolving Fund Program (SRF). Both programs are in DEQ's Engineering Bureau. Please keep in mind that other DEQ permits associated with construction of the project may be required and ongoing compliance monitoring is evaluated monthly by the Water Protection Bureau who may have input for your project upon submittal for review.

If you decide to use SRF and have questions please contact Paul LaVigne, Section Supervisor, at (406) 444-5321 or plavigne@mt.gov. If you do not plan to use SRF and have questions please contact Rachel Clark, Section Supervisor, Public Water Supply Engineering, at (406) 444-6722 or rclark@mt.gov.

Sincerely,

Lindsay Ford
Director's Office Support Coordinator
(406) 444-5270

REF# 18-022

Scott Short

From: Ryan Rittal
Sent: Tuesday, February 13, 2018 9:53 AM
To: Scott Short
Subject: FW: Wibaux Waste Water Project

Ryan Rittal, PE
Senior Engineer/Associate Principal
Stahly Engineering & Associates
851 Bridger Drive, Suite 1 | Bozeman, MT 59715
Phone: (406) 522-9526 | **Fax**: (406) 522-9528
www.seaeng.com

From: Johnson, Sam [mailto:Sam.Johnson@mt.gov]
Sent: Tuesday, February 13, 2018 9:45 AM
To: Ryan Rittal <rrittal@seaeng.com>
Subject: Wibaux Waste Water Project

Dear Mr. Rittal,

My name is Sam Johnson and I work for the DNRC's Water Resources Bureau, in the Billings Regional Office. I assist floodplain administrators with floodplain development permitting. Your letter and attachments concerning Wibaux's Waste Water Project was forwarded to me. I suppose I received it (today) since you attached a floodplain map, and Wibaux is within my regional area. In the future I recommend sending these requests to the appropriate regional offices, since they will likely be forwarded to us anyway. Here is a link to the Water Resources Regional Engineer contacts: http://dnrc.mt.gov/divisions/water/operations/docs/dnrc_wrd_wob_regionalengineersserviceareas-1.pdf

The State Lands Offices are distributed differently, so you will need to contact the Miles City office regarding the use of the State Land, if you haven't already. I'm not sure if Trust Lands headquarters reviewed this or not. Folks in the mailroom don't always know where they should forward these.

I'm familiar with this project, rather the project to expand the original treatment pond to where it is now. The original proposed project was within the floodway boundary of the map you provided. It came as a big shock to the community and their consultant, the amount of effort and expense necessary to obtain a floodplain development permit. The final solution was to move the expansion to where it is now. It appears that your proposal would not require a floodplain permit, unless additional works become needed there.

I have no other comments or concerns.

Sam

Sam Johnson (247-4423)
Regional Engineering Specialist
MT DNRC-Water Resources Division
1371 Rimtop Drive
Billings, MT 59105-1978

ENGINEERING EST. STAHLY & ASSOCIATES, INC. 1970

www.seaeng.com

Engineers and Land Surveyors

851 Bridger Drive, Suite 1, Bozeman, MT 59715 | phone: 406-522-8594 | fax: 406-522-9528

January 30, 2018

Department of Fish, Wildlife and Parks
1420 E. 6th
Helena, MT 59620

RE: Review Request for Wibaux, Montana Wastewater Project

Dear Regulator:

With this letter I am requesting a review and written response identifying possible impacts and requirements resulting from a proposed wastewater treatment upgrade project located at the Wibaux, Montana wastewater treatment facility.

The project will consist of either expanding the existing total retention lagoons or adding a land application system to dispose of the treated effluent. The land application system would consist of a lift station and force main to convey treated effluent to the disposal site and a 1700-foot diameter spray irrigation system. Other improvements include effluent disinfection for the spray irrigation system.

The location of the proposed improvements are shown on the attached maps. The spray irrigation system will be constructed on land owned by the State of Montana. Easements and/or a lease agreement from the state will be necessary for this purpose. Easements from private property owners may be necessary for installation of the force main. The location of the proposed evaporation area is private land and a lease or purchase of this land will be required. The proposed improvements are designed in accordance with Montana DEQ design guidelines and other regulations as appropriate.

This request is required by the 2015 Uniform Application for Montana Public Facility Projects. If you have no comment on this project, please check the box below and countersign at the end of this letter and return to me in the enclosed self-addressed envelope. Thank you for your assistance with this matter. Please call if you have any questions (522-9526).

Sincerely,

Ryan Rittal, P.E.
Project Manager

Enclosure: Project Site Map, Firm Panels, Wetland Map

[X] The Department of Fish, Wildlife and Parks has reviewed the letter and enclosures and has no comments.

Signature

Mike- Have any issues w/ this?
I don't. If you don't we can have Brad sign —
John

Brad- I don't have any concerns for this project.
TJB

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Montana
Historical Society

Historic Preservation
Museum
Outreach & Interpretation
Publications
Research Center

February 6, 2018

Ryan Rittal
Stahly Engineering
851 Bridger Drive, Suite 1
Bozeman MT 59715

RE: WIBAUX MONTANA WASTEWATER PROJECT. SHPO Project #: 2018020505

Dear Mr. Rittal:

I have conducted a cultural resource file search for the above-cited project located in Section 6, T14N R60E, and Section 36, T15N R9E. According to our records there have been no previously recorded sites within the designated project area. However, there has been one previously conducted cultural resource inventory done in the area.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old we would recommend that they be recorded and a determination of their eligibility be made.

As long as there will be no disturbance or alteration to structures over fifty years of age we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project we would ask that our office be contacted and the site investigated.

If you have any further questions or comments you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: DEQ/AIR&WATER WASTE MNG/2018

225 North Roberts Street
P.O. Box 201201
Helena, MT 59620-1201
(406) 444-2694
(406) 444-2696 FAX
montanahistoricalsociety.org

Big Sky. Big Land. Big History.

Montana Historical Society

FILE SEARCH INVOICE

Montana State Historic Preservation Office
1410 8th Avenue, PO Box 201202
Helena, MT 59620-1202
(406)444-7715
montanahistoricalsociety.org

DATE: 6-Feb-18

SHPO Invoice #: 2018020505

Bill To:

Contact Name:	Ryan Rittal
Organization:	Stahly Engineering
Address:	851 Bridger Drive, Suite 1
City/State/Zip:	Bozeman MT 59715

File Search Fee Structure
$25 / Section

For questions contact:
Damon Murdo
dmurdo@mt.gov
406-444-7767

Project Name:	WIBAUX MONTANA WASTEWATER PROJECT

Total Cost:	**$25.00**

Total sections searched for SHPO Project #: 2018020505	**1**

Please make all checks payable to:
Montana Historical Society
PO Box 201201
Helena, MT 59620

Or
Pay Online by clicking below
https://otc.cdc.nicusa.com/Public2.aspx?portal=montana&organization=Montana%20Historical%20Society%20SHPO

Due upon receipt. Please pay within 30 days.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Montana Ecological Services Office
585 Shephard Way, Suite 1
Helena, Montana 59601-6287

In Reply Refer To:
M.29 Public (I)
06E11000-2018-TA-0234
06E11000-2018-CPA-0046

February 26, 2018

Ryan Rittal, P.E.
Stahly Engineering and Associates
851 Bridger Drive, Suite 1
Bozeman, Montana 59715

Dear Mr. Rittal:

Thank you for your letter dated January 30, 2018, requesting U.S. Fish and Wildlife Service (Service) comment on the Wibaux Wastewater Treatment Upgrade project. The proposed project will consist of either expanding the existing total retention lagoons or adding a land application system to dispose of treated effluent. The land application system would consist of a lift station and force main to convey treated effluent to the disposal site and a 1,700-foot diameter spray irrigation system. The location of the proposed spray irrigation system is on land owned by State of Montana, requiring easements or a lease agreement from the state. The location of the proposed evaporation area is on private land, requiring lease or purchase of this land. Your letter and maps of the proposed project area were received by our office on February 2, 2018.

Our comments are prepared under the authority of, and in accordance with, the provisions of the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250), and the Endangered Species Act (16 U.S.C. 1531 et. seq.). Our comments do not address the overall environmental acceptability of the proposed action. We offer the following comments for your consideration.

Migratory Bird Treaty Act

We have reviewed the provided information on the proposed project and have determined that there could be potential effects to migratory birds. The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted. To the extent practicable, necessary vegetation clearing, grubbing, and filling construction activities should be scheduled so as to avoid and minimize impacts to nesting birds, if present in the project area. If work is proposed to take place in migratory bird habitats that may result in take of migratory birds, their eggs, or active nests, the Service recommends that the project proponent take all practicable measures to avoid and minimize take, such as maintaining adequate buffers, to protect the birds until the young have fledged. Active nests may not be removed. The Service has developed, and

continues to revise and develop, general and industry-specific conservation measures for avoiding and minimizing impacts to birds (https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php). We recommend that the proposed project consider and incorporate these measures into project design, construction, and documentation as appropriate.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald or golden eagles, including their parts, nests, or eggs. The BGEPA provides criminal and civil penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof. The BGEPA defines "take" as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagles return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

The Service is not aware of any known bald or golden eagle nests within several miles of the project. If active eagle nests are present within 0.5 mile of the project during construction, we recommend that the proponent comply with seasonal restrictions and construction / development distance buffers specified in the 2010 Montana Bald Eagle Management Guidelines: An Addendum to Montana Bald Eagle Management Plan (1994) in order to avoid/minimize the risk for eagle take.

Threatened and Endangered Species

The current list of candidate, proposed, threatened or endangered species, and designated critical habitat occurring in Wibaux County, Montana is as follows:

Scientific Name	***Common Name***	***Status****
Scaphirhynchus albus	Pallid Sturgeon	LE
Sterna antillarum athalassos	Interior Least Tern	LE
Grus americana	Whooping Crane	LE
Myotis septentrionalis	Northern Long-eared Bat	LT
Charadrius melodus	Piping Plover	LT

*LE=Listed as Endangered, LT=Listed Threatened, C=Candidate species for listing, P=Proposed, CH=Designated Critical Habitat

Based on the location of this proposed project within an existing agricultural setting, we do not anticipate its implementation would result in adverse effects to listed, proposed, or candidate threatened or endangered species, or listed or proposed critical habitat.

Additional Guidance

In addition to coordination with the Service, we recommend coordination with Montana Fish, Wildlife and Parks and the Montana Natural Heritage Program. These agencies may be able to provide updated, site-specific information regarding eagle and other raptor nests, as well as all other fish, wildlife, and sensitive plant resources occurring in the proposed project area. Contact information for these two agencies is below:

Montana Fish, Wildlife and Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, Montana 59620-0701
Phone: (406) 444-2535

Montana Natural Heritage Program
1515 East 6th Avenue, Box 201800
Helena, Montana 59620-1800
Phone: (406) 444-5354

This project should be re-analyzed if new information reveals effects of the action that may affect listed species or designated or proposed critical habitat (1) in a manner or to an extent not considered in this letter, (2) if the action is subsequently modified in a manner that causes an effect to a listed species or designated or proposed critical habitat that was not considered in this letter, and (3) if a new species is listed or critical habitat is designated that may be affected by this project.

If wetlands are impacted by this proposed project, Corps of Engineers Section 404 permits may be required. The Service suggests any proposed or future project be designed to avoid and minimize impacts to wetland areas, stream channels and surrounding vegetation to the greatest extent possible. Direct, indirect and cumulative impacts, along with future activities required to maintain these improvements, should be analyzed.

Thank you for the opportunity to comment on the Wibaux Wastewater Treatment Upgrade project. The Service appreciates your efforts to incorporate fish and wildlife resource concerns into your project planning. If you have further questions related to this issue, please do not hesitate to contact Karen Newlon at (406) 449-5225, extension 209.

Sincerely,

for Jodi L. Bush
Office Supervisor